

What is claimed is:

1. A central controller system to coordinate thwarting denial of service attacks on a victim data center that is coupled to a network comprises:

a communication device to receive data from a plurality of monitors, over a hardened, redundant network;

a computer system, the computer system comprising:

a process that executes on the computer system to analyze the data from the plurality of monitors to determine network traffic statistics that can identify malicious network traffic.

2. The system of claim 1 wherein the computer system further comprises:

an analysis and filtering process to identify malicious traffic and to eliminate the malicious traffic from entering the victim data center.

3. The system of claim 1 wherein the data analyzed by the control center is sampled packet traffic and/or accumulated and collected statistical information about network flows.

4. The system of claim 1 wherein the control center aggregates traffic information and coordinates measures to locate and block the sources of an attack.

5. The system of claim 1 wherein the control center is a hardened site.

6. The system of claim 1 wherein the analysis process executed on the control center analyzes data from gateways and data collectors dispersed throughout the network.

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7. The system of claim 1 wherein the analysis process classifies attacks and determines a response based on the class of attack.

8. The system of claim 7 wherein the classes of attack are denoted as low-grade with spoofing, low-grade without spoofing and high-grade whether spoofing or non-spoofing.

9. A method to coordinate thwarting denial of service attacks on a victim data center that is coupled to a network comprises:

receiving data from a plurality of monitors, over a hardened, redundant network; and

analyzing the data from the plurality of monitors to determine network traffic statistics that can identify malicious network traffic.

10. The method of claim 9 further comprising:

determining a filtering process to eliminate the malicious traffic from entering the victim data center.

11. The method of claim 9 further comprising:

aggregating traffic information and coordinating measures to locate and block the sources of an attack.

12. The method of claim 9 wherein receiving and analyzing are performed by a control center coupled to the data collectors via the hardened, redundant network.

13. The method of claim 9 wherein plurality of monitoring devices are data collectors dispersed throughout the

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network and at least one gateway device that is disposed adjacent the victim site to protect the victim and wherein analyzing comprises:

analyzing at a control center data from the at least one gateway and the data collectors dispersed throughout the network.

14. The method of claim 9 wherein analyzing comprises:

classifying attacks and determining a response based on the class of attack.

15. The method of claim 14 wherein the classes of attack are denoted as low-grade with spoofing, low-grade without spoofing and high-grade whether spoofing or non-spoofing.

16. The method of claim 14 further comprising:

sending requests to gateways and/or data collectors for data pertaining to an attack.

17. The method of claim 14 further comprising:

sending requests to gateways and/or data collectors for requests to install filters to filter out attacking traffic.

18. A computer program product to coordinate thwarting denial of service attacks on a victim data center that is coupled to a network comprises instructions to cause a computer to:

receive data from a plurality of monitors, over a hardened, redundant network; and

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analyze the data from the plurality of monitors to determine network traffic statistics that can identify malicious network traffic.

19. The computer program product of claim 18 wherein instructions to receive and analyze are performed by a control center coupled to data collectors via a hardened, redundant network.

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